

IN THE UNITED STATES DISTRICT COURT
NORTHERN DISTRICT OF TEXAS
FORT WORTH DIVISION

DAVID BARNETT,

Plaintiff,

VS.

PROCOM HEATING, INC.,

Defendant.

§
§
§
§
§
§
§
§

NO. 4:17-CV-380-A

MEMORANDUM OPINION AND ORDER

Came on for consideration the motion of defendant, Procom Heating, Inc., to exclude the expert testimony of David R. Sneed ("Sneed") and Johnie P. Spruiell, P.E. ("Spruiell"). The court, having considered the motion, the response of plaintiff, David Barnett, the reply, the record, and applicable authorities, finds that the motion should be granted.

I.

Plaintiff's Claims

The operative pleading is plaintiff's first amended complaint filed June 20, 2017. Doc.¹ 8. In it, plaintiff alleges that a heater manufactured by defendant malfunctioned during operation and emitted a candling flame instead of concentrated hot air, engulfing plaintiff's hangar and its contents in flames. Specifically, plaintiff says that the heater had a design or manufacturing defect in a set screw that caused the fan blades to

¹The "Doc. __" reference is to the number of the item on the docket in this action.

detach from the motor shaft, causing a flame, rather than hot air, to be emitted due to poor combustion. Plaintiff asserts claims for strict products liability, negligence, breach of express and implied warranties, and violation of the Texas Deceptive Trade Practices-Consumer Protection Act.

II.

Grounds of the Motion

Plaintiff has designated Sneed as an expert on the fire's cause and origin, and Spruiell as an expert on the alleged defect in the heater. Defendant says that Spruiell is not qualified to render an opinion concerning the alleged defect in the design of the heater. Further, the opinions of both Sneed and Spruiell are unreliable.

III.

Standards Applicable to Expert Testimony

Rule 702 of the Federal Rules of Evidence provides:

A witness who is qualified as an expert by knowledge, skill, experience, training, or education may testify in the form of an opinion or otherwise if:

- (a) the expert's scientific, technical, or other specialized knowledge will help the trier of fact to understand the evidence or to determine a fact in issue;
- (b) the testimony is based on sufficient facts or data;
- (c) the testimony is the product of reliable principles and methods; and
- (d) the expert has reliably applied the principles and methods to the facts of the case.

Thus, for expert testimony to be admissible, the expert must be qualified and his testimony must be relevant and reliable. In determining the admissibility of expert testimony, the trial court acts as gatekeeper, following the guidance of the Supreme Court in Daubert v. Merrell Dow Pharm., Inc., 509 U.S. 579 (1993), and Kumho Tire Co. v. Carmichael, 526 U.S. 137 (1999).

As for qualification, the court must ensure that those who purport to be experts have expertise concerning the actual subject about which they offer opinions. Gammill v. Jack Williams Chevrolet, Inc., 972 S.W.2d 713, 719 (Tex. 1998); Broders v. Heise, 924 S.W.2d 148, 153 (Tex. 1996). For example, in Wilson v. Woods, a reputable fire investigator was prevented from testifying as an accident reconstruction expert because his expertise was no greater than that of any other individual with a general scientific background. 163 F.3d 935, 938 (5th Cir. 1999). Credentials alone are not determinative; the expert must be qualified to give an opinion on a particular subject. Christophersen v. Allied-Signal Corp., 939 F.2d 1106, 1112-13 (5th Cir. 1991).

As for reliability, both parties cite to Mondis Tech., Ltd. v. LG Electronics, Inc., which explains:

To satisfy the reliability prong of *Daubert*, an expert's opinion testimony must be based upon "sufficient data" and must be "the product of reliable principles and methods" that are "reliably" applied "to

the facts of the case." Fed. R. Evid. 702 & advisory committee note. When evaluating the reliability of the proffered testimony of an expert, "Rule 702 demands that expert testimony relate to scientific, technical or other specialized knowledge, which does not include unsubstantiated speculation and subjective beliefs." *Diviero v. Uniroyal Goodrich Tire Co.*, 114 F.3d 851, 853 (9th Cir. 1997) (citing *Daubert*, 509 U.S. at 590). "The reliability analysis applies to all aspects of an expert's testimony: the methodology, the facts underlying the expert's opinion, and the link between the facts and the conclusion." *Knight v. Kirby Inland Marine, Inc.*, 482 F.3d 347, 355 (5th Cir. 2007) (quoting *Heller v. Shaw Indus., Inc.*, 167 F.3d 146, 155 (3d Cir. 1999)). "But nothing in either *Daubert* or the Federal Rules of Evidence requires a district court to admit opinion evidence which is connected to existing data only by the *ipse dixit* of the expert." *General Elec. Co. v. Joiner*, 522 U.S. 136, 146 (1997). However, "[w]hen the methodology is sound, and the evidence relied upon sufficiently related to the case at hand, disputes about the degree of relevance or accuracy (above this minimum threshold) may go to the testimony's weight, but not its admissibility." *i4i Ltd. P'ship v. Microsoft Corp.*, 598 F.3d 831, 852 (Fed. Cir. 2010). That is, a trial court is not permitted under *Daubert* to "transform a *Daubert* hearing into a trial on the merits." *Pipitone v. Biomatrix, Inc.*, 288 F.3d 239, 250 (5th Cir. 2002).

No. 2:07-CV-565-TJW-CE, 2011 WL 2417367, at *1 (E.D. Tex. June 14, 2011).

IV.

Analysis

Plaintiff does not dispute that to meet his burden of proof, he must show that the heater was defective and there was a causal connection between the defect and the fire. Plaintiff has designated Spruiell as an expert regarding the defect. Defendant

maintains that Spruiell is not qualified to testify on that subject because he lacks specific, particular expertise, education, or training in the area of oil-fired or kerosene-fired heaters. Spruiell testified that he had a general mechanical engineering background, but had not done a job involving a heater like the one at issue and had no particular expertise regarding it. Doc. 20 at 89. Nor was he an expert or did he ordinarily deal with photoelectric or flame preempting devices like the heater at issue had. Id. at 123. Although it appears that Spruiell has spent the bulk of his career "doing forensic engineering on individual different types of products," id. at 86, 123-24, plaintiff has not shown that Spruiell's work qualifies him to give an opinion in this case. See, e.g., Roman v. Western Mfg., Inc., 691 F.3d 686, 692-93 (5th Cir. 2012) (although mechanical engineer had no experience with stucco, he had a Ph.D. in his field and had worked extensively with the same kind of pumps as the one in issue); Koenig v. Beekmans, No. 5-15-CV-00822-RCL-RBF, 2017 WL 6003022, at *2-3 (W.D. Tex. Dec. 1, 2017) (neuropsychologist with over 30 years' experience performing assessments of patients with traumatic brain injuries was qualified to criticize clinical use of particular test at issue even though he had no specialized knowledge regarding it).

Defendant additionally urges that, even if Spruiell is qualified to testify, his opinions concerning the defect in the heater are unreliable and, therefore, inadmissible. Under Spruiell's theory, a defect allowed the set screw holding the fan blade to the shaft of the fan motor to become loose; and, the fan blade came off the shaft of the fan motor before plaintiff started the heater on the day of the fire. According to Spruiell,

[o]ur opinion is that the set screw in the fan hub became loose previous to the fire, during heater operation. Then, when [plaintiff] applied the slosh test to check fuel level, the loose fan came off the motor shaft. When the heater then was operated, poor combustion due to lack of fan operation caused flames to issue from the front, serving as the ignition source for the hangar fire.

Doc. 20 at 34.

The evidence submitted with regard to the motion reflects that: The fire took place on February 11, 2014. Doc. 20 at 26. Sneed met with plaintiff at the scene of the fire on February 24, 2014, and took the heater to his laboratory. Id. at 27-28. On March 18, 2014, Sneed and Spruiell examined the heater at Sneed's laboratory by removing the top cover and visually inspecting what was underneath. Id. at 28. The fan was not connected to the shaft of the motor, but lying in front of it. The set screw remained in place in the fan hub, but had backed out about .015 inches. Id.

Sneed and Spruiell do not know the exact cause for the loosening of the set screw. Doc. 20 at 32. Spruiell would expect

that if the fan/hub/shaft assembly were properly designed, and if the set screw were properly tightened at the factory, minor vibrations encountered during operation would not loosen the set screw. But, aerodynamic coupling between the fan blades and nearby air vanes at the back of the combustion chamber "could have played a role." Id. And, "[e]ventually, the result could be loosening of the set screw." Id. However, Spruiell did not do any testing to establish that such a loosening could have occurred. Id. at 118-19. Rather, he relied on a hunch. Id. at 118.

Photographs taken during the inspection of the heater show that the cover could have been taken off after the fire and before Sneed and Spruiell made their inspection. Id. at 117. In addition, markings on the shaft of the fan motor are consistent with the set screw being tightened, loosened, and then insufficiently tightened. Id. at 104-05. If the set screw had worked its way loose and moved along the shaft on its own, one would expect to find a scrape along the shaft, but there is none. Id. at 119-20.

Q. But the second indentation would have been--the first indentation would have been made from the torquing of the set screw?

A. That's right. At the factory.

Q. The second indentation, in your mind, was not the result of torquing of the set screw, but wobbling of the hub on the shaft?

A. Once the set screw had gotten loose enough to escape from the first factory indentation.

Q. Okay. Why do we not see evidence of a scrape mark between the two indentations?

A. I don't know.

Q. Is that something that you would expect to find if no human intervention was involved in--between the first and the second indentations?

A. I really don't know why there's not a scrape. One would think there would be at least some small scrape, but I don't have an explanation for that.

Q. . . . I'm not saying that the set screw was or was not loose, but I'm just saying physically what we see here is consistent with the set screw being unscrewed and then re-screwed in a different location. I'm not saying that that happened. I'm just saying the evidence is consistent with that.

A. That is a way to interpret the evidence.

Id.

Spruiell's theory that the set screw simply became loose on its own is nothing more than ipse dixit.

Spruiell further theorizes that once the set screw became loose and the fan moved closer to the motor (that is, slightly rearward, id. at 32), the fan came off the opposite end of the shaft when plaintiff performed a slosh test to determine how much fuel was in the heater. Id. at 31. Spruiell did not talk to plaintiff about how the slosh test was performed, i.e., how high he lifted the handle or how hard he bumped one or both wheels on the threshold of the doorway. Id. at 95-97. He did not do any testing of an exemplar heater to determine whether the fan blade could fall off during a slosh test and if so, whether the person performing the test would hear it fall. Id. at 95. Again, the

opinion is simply based on the ipse dixit of the expert. Because the analytical gap between the data and the opinion is too great, the testimony will be excluded. General Elec. Co. v. Joiner, 522 U.S. 136, 146 (1997).

Defendant additionally, and alternatively, maintains that Sneed's causation theory is unreliable due to a number of missing facts. As set forth in the Guide for Fire and Explosion Investigations, NFPA 921, which Sneed purported to follow:

The ignition sequence of a fire event is defined as the succession of events and conditions that allow the source of ignition, the fuel, and the oxidant to interact in the appropriate quantities and circumstance for combustion to begin. Simply identifying a fuel or an ignition source by itself does not and cannot describe how a fire came to be. Fire results from the interaction of fuel, an oxidant, and an ignition source. Therefore, the investigator should be cautious about deciding on a cause of a fire just because a readily ignitable fuel, potential ignition source, or any other of an ignition sequence's elements is identified. The sequence of events that allow the source of ignition, the fuel, and the oxidant to interact in the appropriate quantities and circumstances for combustion to begin, is essential in establishing the cause.

Doc. 20 at 10-11. Here, Sneed was unable to testify to the temperature of the flames emitted by the heater, the ignition temperature of the material that caught fire, how close the material was to the flames emitted by the heater, or how long the material was exposed to flames emitted by the heater. Doc. 20 at 62, 65-66. He simply made the leap that a properly functioning

heater could not have caused the fire to the conclusion that a malfunctioning heater must have caused the fire because there was a fire.

Further, NFPA 921 requires that the cause determination for the fire account for the actions of safety devices. Id. at 13. But Sneed testified that the safety features were beyond his scope. Id. at 79-80. Plaintiff says that Sneed relied upon Spruiell's opinions in this regard, but does not point to any testimony or opinion of Spruiell regarding the heater's safety devices. Doc. 25 at 17. As previously noted, Spruiell testified that safety devices was not an area he practices in ordinarily. Doc. 20 at 123. And, his report simply makes the conclusory statement that he and Sneed "believe that in this case, overall evidence indicates that the heater either did not shut off, or shut off too slowly." Id. at 33. They simply had "insufficient information" to evaluate the safety features of the heater. Id. That the safety device failed because there was a fire is the kind of circular reasoning that is not helpful to the trier of fact and must be excluded.

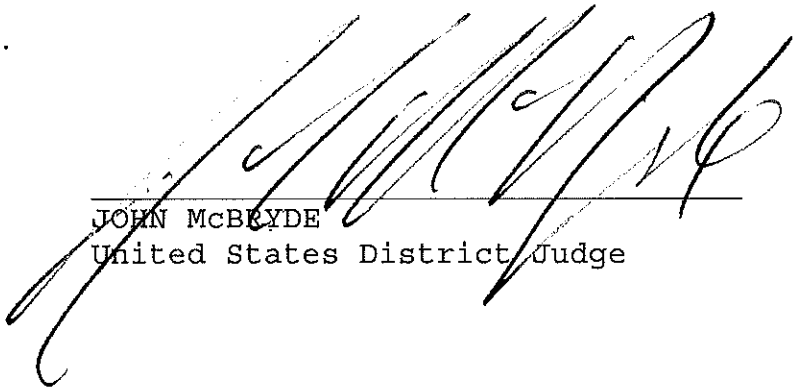
V.

Order

For the reasons discussed,

The court ORDERS that defendant's motion to exclude be, and is hereby, granted, and Sneed and Spruiell will not express any opinions to the effect that the heater at issue was defective or that a defect in the heater caused the fire.

SIGNED April 2, 2018.



JOHN MCBRYDE
United States District Judge